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| (51) International Patent Classification ⁶ : C10M 105/42, C09K 5/04, C07C 69/67 | A1 | (11) International Publication Number: WO 98/46706 (43) International Publication Date: 22 October 1998 (22.10.98) | | | | | | | | | |
| (21) International Application Number: PCT/FI98/00329 (22) International Filing Date: 14 April 1998 (14.04.98) (30) Priority Data: <table border="0"> <tr> <td>971548</td> <td>11 April 1997 (11.04.97)</td> <td>FI</td> </tr> <tr> <td>971549</td> <td>11 April 1997 (11.04.97)</td> <td>FI</td> </tr> <tr> <td>980730</td> <td>31 March 1998 (31.03.98)</td> <td>FI</td> </tr> </table> (71) Applicant (for all designated States except US): NESTE OY [FI/FI]; Keilaniemi, FIN-02150 Espoo (FI). (72) Inventors; and (75) Inventors/Applicants (for US only): KOISTINEN, Jari [FI/FI]; Lamminmutka 2 C 14, FIN-40520 Jyväskylä (FI). RJS-SANEN, Kari [FI/FI]; Hankamäentie 13, FIN-41520 Hankasalmi (FI). SILVENNOINEN, Laura [FI/FI]; Kilpisenkatu 16 A 20, FIN-40100 Jyväskylä (FI). KOSKIMIES, Salme [FI/FI]; Hämeenapajantie 7, FIN-00850 Helsinki (FI). (74) Agents: LAINE, Seppo et al.; seppo Laine Oy, Lönnrotinkatu 19 A, FIN-00120 Helsinki (FI). | | 971548 | 11 April 1997 (11.04.97) | FI | 971549 | 11 April 1997 (11.04.97) | FI | 980730 | 31 March 1998 (31.03.98) | FI | (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With a revised version of the international search report.</i> <i>In English translation (filed in Finnish).</i> (88) Date of publication of the revised version of the international search report: 29 April 1999 (29.04.99) |
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| (54) Title: POLYOL AND COMPLEX ESTERS FOR USE WITH, IN PARTICULAR, FLUORINATED REFRIGERANTS (57) Abstract <p>The invention concerns a refrigerant composition which comprises a chlorine-free hydrofluorocarbon based refrigerant and, mixed with the refrigerant, a lubricant comprising a polyol ester. According to the invention the polyol ester comprises an ester of 3-hydroxy-2,2-dimethylpropyl-3-hydroxy-2,2-dimethylpropionate, the carboxylic acid residue of which is derived from a linear or branched C₄...C₁₈-carboxylic acid or an anhydride thereof, or it is derived from a mixture of linear or branched C₄...C₁₈-carboxylic acids or anhydrides thereof. The present invention also concerns novel complex ester of 3-hydroxy-2,2-dimethylpropyl-3-hydroxy-2,2-dimethylpropionate, which contain residues of mono- or bivalent carboxylic acids. The novel esters exhibit good solubility in fluorinated hydrocarbons and excellent lubricating properties.</p> | | | | | | | | | | | |